



EOSDIS

NASA'S EARTH OBSERVING SYSTEM
DATA AND INFORMATION SYSTEM

OpenSearch Status

ESIP Summer Meeting 2016

July 19-22 2016

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The material is based upon work supported by the National Aeronautics and
Space Administration under Contract Number **NNG15HZ39C**

Agenda

- ESIP Best Practices
 - Doug Newman
- CEOS Best Practices and Development Guide
 - Doug Newman
- OpenSearch audit
 - Sam Silva

ESIP BEST PRACTICES

Status

- Version 6
- OPeNDAP guidelines have been returned to the Best Practices
- It's time to go 1.0 and put this thing to bed

CEOS BEST PRACTICES AND DEVELOPMENT GUIDE

Status

- Version 1.1 of the Best Practices is about to be publicly released
- There are no significant deviations from the ESIP Best Practices
- Version 1.3 of the Developer Guide is public
- This is effectively a bridging document between ESIP and CEOS OpenSearch Best Practices

OPENSEARCH AUDIT

Overview

- Applied the OpenSearch Validator tool to 20 different organizations
 - CMR, GCMD, CWIC, Canada (ONC), PO.DAAC, NSIDC, GHRC, GSFC, ESA, USGS ERDAP, ORNL, MODAPS, CCMEQ, EUMETSAT, FEDEO, Ocean NCEI, Laadsweb, LANCE MODIS, NGDC, ESRI Geoportal Sandbox
- In general: ~25% requirements passed

Success

- OpenSearch Parameter extension Version 1.0 Draft 1
 - 80% Pass

Problem areas

- OGC OpenSearch Geo and Time Extensions
 - 7% Pass
- OGC OpenSearch extension for Earth Observation
 - 14% Pass
- OpenSearch Relevance extension Version 1.0 Draft 1
 - 15% Pass

The details

Organization	Reference URL	OpenSearch Version 1.1 Draft 5	OpenSearch Geo Version 1.0 Draft 2	OpenSearch Time Version 1.0 Draft 1	OpenSearch Parameter extension Version 1.0 Draft 1	ESIP OpenSearch Best PracticesScore:	OGC OpenSearch Geo and Time Extensions	Total
CMR	https://cmr.earthdata.nasa.gov/opensearch	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
GCMD	http://gcmd.gsfc.nasa.gov/KeywordSearch/default/openSearch.jsp?Portal=cwic	63.64%	66.67%	100.00%	100.00%	15.56%	42.86%	44.62%
CWIC	<a href="http://cwic.wgiss.ceos.org/opensearch/datasets/<dataset>/osdd.xml">http://cwic.wgiss.ceos.org/opensearch/datasets/<dataset>/osdd.xml	0.00%	0.00%	0.00%	0.00%	4.44%	0.00%	0.00%
Canada (ONC)	http://dap.onc.uvic.ca/erddap/opensearch1.1/index.html	0.00%	0.00%	0.00%	100.00%	26.67%	0.00%	18.46%
PO.DAAC	http://podaac.jpl.nasa.gov/ws/search/dataset/osd.xml	47.27%	33.33%	100.00%	100.00%	15.56%	0.00%	27.69%
NSIDC	http://nsidc.org/api/opensearch/1.1/dataset/description	36.36%	33.33%	33.33%	100.00%	26.67%	0.00%	27.69%
GHRC	http://ghrc.nsstc.nasa.gov/hydro/ghost.xml	0.00%	0.00%	0.00%	0.00%	4.44%	0.00%	0.00%
GSFC	http://mirador.gsfc.nasa.gov/mirador_dataset_opensearch.xml	56.36%	100.00%	100.00%	100.00%	77.78%	0.00%	55.38%
ESA	http://eo-virtual-archive4.esa.int/search/ER02_SAR_RAW_OP/description	90.91%	66.67%	100.00%	100.00%	26.67%	42.86%	58.46%
USGS ERDDAP	http://www1.usgs.gov/erddap/opensearch1.1/description.xml	54.55%	33.33%	66.67%	100.00%	15.56%	0.00%	35.38%
ORNL	http://bison.usgs.ornl.gov/doc/api.jsp	0.00%	0.00%	0.00%	100.00%	26.67%	0.00%	18.46%
MODAPS	http://lance-modis.eosdis.nasa.gov/user_services/api-lance.html#getOpenSearch	0.00%	0.00%	0.00%	0.00%	4.44%	0.00%	0.00%
CCMEO	http://ceocat.ccrs.nrcan.gc.ca/opensearch_description_document.xml	0.00%	0.00%	0.00%	0.00%	4.44%	0.00%	0.00%
EUMETSAT	http://rs211980.rs.hosteurope.de/eo-csw-umart/servlet/os-description	47.27%	66.67%	100.00%	100.00%	15.56%	0.00%	32.31%
FEDEO	http://geo.spacebel.be/opensearch/description.xml	63.64%	66.67%	100.00%	100.00%	26.67%	0.00%	43.08%
Ocean NCEI	http://data.nodc.noaa.gov/geoportal/openSearchDescription	0.00%	0.00%	0.00%	0.00%	4.44%	0.00%	0.00%
Ladsweb	http://ladsweb.nascom.nasa.gov/data/dataset_opensearch.xml	47.27%	33.33%	33.33%	100.00%	15.56%	0.00%	24.62%
LANCE MODIS	http://lance-modis.eosdis.nasa.gov/user_services/dataset_opensearch.xml	47.27%	33.33%	33.33%	100.00%	15.56%	0.00%	24.62%
NGDC	http://www.ngdc.noaa.gov/geoportal/openSearchDescription	36.36%	33.33%	0.00%	100.00%	26.67%	0.00%	26.15%
ESRI Geoportal Sandbox	http://gptogc.esri.com/geoportal/openSearchDescription	63.64%	66.67%	66.67%	75.00%	15.56%	42.86%	36.92%
Average		37.73%	36.67%	46.67%	73.75%	23.45%	11.43%	28.69%

Outreach

- We are currently working with ESRI to get their ESRI GeoPortal compliant with the ESIP OpenSearch Best Practices.

QUESTIONS?

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Raytheon